

AMENDMENTS TO THE SPECIFICATION

Replace paragraph [0009] at page 2, line 27, through page 3, line 8, with:

When liposomes are applied to DDS, it is known that a size of a liposome significantly effect functions thereof. For example, blood vessels of cancer tissues have pores of a submicron size unlike those of normal tissues (Non-patent document 3), and therefore, a size of a liposome needs to be larger than the pore size of the blood vessels in normal tissues and smaller than that of the blood vessels in cancer tissues to achieve selective delivery into cancer tissues. In an experiment in which liposomes having various sizes were intravascularly administered to compare their deliveries to cancer tissues (Non-patent document 4), the liposome having a size of 200 nm or less gave favorable accumulation in the cancer tissues. Further, in a study of oral absorption of liposomes and the like, Jani et al. (Non-patent document 5) revealed that ratios of microparticles taken up from mucous membranes of gastrointestinal tract varied depending on particle sizes. Smaller particles were more easily absorbed from the mucous membranes of the gastrointestinal tract, and where the liposome nano particles had a particle size of 300 nm or less, the liposome nano particles orally administered were also observed in blood.

Replace paragraph [0104] at page 24, line 19, through page 25, line 2, with:

Example 14

In an amount of 10.2 μ mol (178.2 nmol as total lipid and maleimide amount) of the liposomes prepared in Example 12 were added with 11.1 nmol of a peptide having an amino acid sequence of GRKKRRQRRPPQC (hereinafter referred to as TAT peptide) and reacted overnight, and a liposome fraction was purified by using a Sepharose CL4B (registered trade name) column (Amersham Biosciences). The lipid amount in the liposomes obtained was quantified by using a phospholipid content assay kit (Wako Pure Chemical Industries, Ltd.). The liposome sample was diluted with DMEM/F12 medium (0.125, 0.25, 0.5 and 1.0 mg/ml as lipid concentrations) and incubated with cells of a human lung cancer strain (HLC HLC-1) at 37°C for 1.5 hours. The cells were washed and observed under a flow cytometer (FCM)

and a confocal fluorescence microscope. The results of FCM analysis are shown in Fig. 3. It was confirmed that the liposomes not bound with TAT did not react with the cells, whilst the liposomes bound with TAT reacted with the cells. In addition, in the observation under a confocal fluorescence microscope, binding of TAT-bound liposomes with cells were more clearly observed compared with the TAT-unbound liposomes, and uptake of TAT-bound liposomes in a part of the cells was observed.